DOCUMENT RESUME

ED 144 727 RC 010 049

AUTHOR Murdock, Steve H.; Schriner, Eldon C.
TITLE Social and Economic Determinants of the Level of Support for Environmental Protection and Economic Growth in a Rural Population.
PUB DATE Sep 77
NOTE 33p.; Paper presented at the Annual Meeting of the Rural Sociological Society (Madison, Wisconsin, September 1977)

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS Academic Achievement; Age; *Community Attitudes; Community Size; *Conservation (Environment); *Economic Development; Family Income; Occupations; *Place of Residence; Rural Farm Residents; Rural Nonfarm Residents; Rural Population; *Rural Urban Differences; Social Class; *Socioeconomic Status; Statistical Data; Urban Population
IDENTIFIERS *North Dakota; *Place of Residence

ABSTRACT

Based on a secondary analysis of data from a statewide survey of North Dakota residents conducted during the spring of 1976, this study examined the differences in levels of support for environmental protection and economic growth via respondent characteristics, respondent characteristics within residence types, and occupational and social class characteristics within residence types. A mail questionnaire was sent to a random sample of 10,000 residents over the age of 16, stratified by population size and State Planning Region. Roughly 4,000 questionnaires were returned with 3,963 useable questionnaires being obtained after processing. The questionnaire addressed various issues concerning residents' goals for the State's future. Responses were defined as pro-economic and pro-environmental responses. The dichotomized pattern was the major dependent variable. The independent variables used in the general analysis included standard social and demographic variables. For this study, only those variables which were most strongly related to the dependent variables were used: age, occupation, income, education, and residence. Also a social class variable was constructed from the educational and income variables. Findings included: support for environmental protection was strongest in the younger age groups and decreased with age; those in lower income and educational levels were more supportive of economic growth; and support for economic growth was strongest for residents in towns under 500, followed by residents of towns of 500-2,500. (NQ)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED144727

rec 01-09-77

Social and Economic Determinants of the Level of Support for Environmental Protection and Economic Growth in a Rural Population

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

By

Steve H. Murdock
Department of Rural Sociology
Texas A & M University
College Station, Texas

and

Eldon C. Schriner
Department of Sociology/Anthropology
North Dakota State University
Fargo, North Dakota

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Steve H. Murdock

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS

Paper Prepared for the 1977 Annual Meeting of the
Rural Sociological Society

RC010049

The field of environmental sociology is a rapidly expanding one, with a growing body of literature (Morrison, 1974). As with most developing fields in the social sciences, its beginning stages of development have been dominated by attempts to delineate its boundaries (Klausmen, 1972), to point out its central issues (Burch, et al., 1972; Morrison, et al., 1974), to expand its theoretical base (Buttel and Flinn, 1976), and to determine the major social, economic, and demographic variables that differentiate between the response patterns of persons on its key conceptual and substantive dimensions (McEvoy, 1972; Dillman and Christenson, 1972). In regard to this last task, a wide range of differentials have been identified in terms of the ideological, social and demographic characteristics of individuals, including age, sex, levels of education and income and party affiliation, as well as social structural aspects, such as area of residence and social class (Buttel and Flinn, 1974, 1976; Dillman and Christenson, 1972; Stallings, 1973; Schnaiberg, 1975; McEvoy, 1972; Morrison, et al., 1972; Harry, et al., 1969; Gale, 1972).

One of the issues which has been examined in terms of such differentials is the relative levels of support for environmental protection versus economic growth in an area, and among the most often examined differentials in terms of this issue have been those for differences in residence and social class. Thus, urban persons of higher socioeconomic status have been found to be more supportive of

environmental protection than rural residents and those of lower socioeconomic status.

In explaining these differentials, the theoretical perspective most often employed has been the conflict approach (Buttel and Flinn, 1974, 1976). In using this perspective, however, residence and social class differences have been examined largely as they affect different ideologies toward nature and the natural environment. Rural persons are felt to be more likely than urban persons to take the quality of the environment for granted and to see it in an exploitative way, and lower socioeconomic status persons are held to be less well educated as to the consequences of environmental degradation. Thus, ideology has often been stressed as the key variable. Social position is seen largely as determining a particular ideology, which in turn determines levels of support for environmental protection, but is seldom viewed conceptually as a direct determinant of levels of support for environmental protection.

At the same time, a majority of past studies have tended, either because of the limitations of sample size or because of a particular conceptual orientation, to examine residence and social class effects without taking the differentials that exist within detailed educational, occupational, income and residence categories into account. Thus, although executives and educators may both be placed within an upper social class ranking, it is likely that they will look quite differently on the issue of whether environmental protection or economic growth should be the dominant goal for an area. On the other hand, one might also expect that persons with the same social class

characteristics may be more supportive of economic growth if they live in a small town that has experienced economic decline, than if they live in urban areas. Thus, the need for a greater specification of residential and social class effects is evident.

The failure to examine social position variables, such as residence and social class, as direct effects on perceptions of the environment and to examine them in sufficient detail is unfortunate both theoretically and empirically.

Conceptually, both of the dominant sociological perspectives, the conflict and functionalist perspectives (Marx and Engels, 1930; Parson, 1951) would seem to suggest that residence and social class factors are key determinants of one's perspective and, thus, should be examined as they directly affect such perspectives. In addition, the need to develop more effective typologies as a means of constructing more general theories (Brodbeck, 1968) would seem to suggest the need to examine more detailed aspects of residence and social class differences.

Empirically, the need to specify the exact nature of relationships reflects the principal of parsimony, and the need to delineate the effects of various combinations of factors. Thus, such an analysis provides a means for determining both the nature of a relationship, as well as examining the confounding effects of various combinations of variables.

A more detailed examination of social class and residential differentials in the determination of the relative levels of support for environmental protection and economic growth is suggested by several factors then and is pursued in the present article. Using a

statewide sample of residents in North Dakota, differences in levels of support for environmental protection and economic growth are shown by respondent characteristics, by respondent characteristics within residence types and by occupational and social class characteristics within residence types.

Methodology

The data reported here are the results of a secondary analysis of data from a statewide survey of North Dakota residents conducted during the spring of 1976 by the North Dakota State Planning Division. This survey consisted of a mail questionnaire sent to a random sample of 10,000 North Dakota residents over the age of 16, stratified by population size and State Planning Region. Of the 10,000 surveys sent, roughly 4,000 were returned with 3,963 useable questionnaires being obtained after processing. Although this represents a less than desired return rate, preliminary analysis (Murdock, 1976) indicates that the demographic characteristics of the sample are generally representative of the characteristics of the population of the state as a whole.

The questionnaire addressed a number of issues concerning residents' goals for the state's future. Among these items was a question which asked: "Of the possible goals listed above, which do you feel is the most important for North Dakota?" The response choices given were:

Goal Number	Possible Goals for North Dakota
1.	Increase the variety of job opportunities for North Dakotans by promoting the growth of business and industry.

Goal Number	Possible Goals for North Dakota
2.	Protect the natural environment, such as rivers, shorelines, badlands, and scenic areas from economic activities which might be damaging.
3.	Increase family incomes so people may purchase more of the consumer goods and services they want.
4.	Keep population growth of the state small by discouraging economic growth.
5.	Decrease the total amount of energy used by industry and individual consumers.
6.	Increase the amount of services state government provides to people of the state.
7.	Reduce the amount of unemployment as much as possible.
8.	Conserve natural resources, such as mineral, land, water, and timber, so that future supplies are insured.
9.	Other (please specify).

For the present analysis, respondents choosing goals 1, 3, and 7 were defined as having given pro-economic responses, while those giving responses 2, 4, 5 and 8 were classified as pro-environmental in their perspectives. Those giving responses 6 and 9 (7.8%) were placed in an "other" category. The dichotomized pattern (ignoring the "other" category) is the major dependent variable of the present analysis. Although this indicator lacks the attributes of an index or scale score, it does provide a rather direct assessment of the dimension of environmental protection versus economic growth.

The independent variables used in the general analysis included standard social and demographic variables (see Table 1). For the present article, analysis was limited to those variables that the general analysis indicated were most strongly related to the dependent

variables. These included age, occupation, income, education and residence. In addition, for the final part of the analysis, a social class variable was constructed from the educational and income variables. Occupation was not included in the index because of the somewhat unusual categories for occupation that were used on the questionnaire, and because occupational breakdowns were thought to be essential for examining within class differentials.[1] The combinations of income and education used for designating social classes were as follows:

Class	Subclass Type	Income	Years of Education
Lower Class	L1	Less than 10,000	Less than 12
	L2	Less than 10,000	12-15
	L3	10,000-24,999	Less than 12
Middle Class	M1	10,000-24,999	12-15
	M2	Less than 10,000	16+
	M3	25,000+	Less than 12
Upper Class	U1	25,000+	16+
	U2	25,000+	12-15
	U3	10,000-24,999	16+

---

[1]The specific questions included on these items were:

Please check the age group in which you belong.
1.__17 or under 2.__18-24 3.__25-34 4.__35-49 5.__50-64 6.__65 & over

Please check the occupation that most describes what you do.

__1. Farmer	__5. Executive, manager proprietor	__8. Skilled labor
__2. Housewife	__6. Sales	__9. Semi and unskilled labor
__3. Professional (doctor, lawyer, dentist)	__7. White collar, civil service	__10.Retired
__4. Educator		__11.Student
		__12.Other (specify)

Please indicate your approximate family income before taxes for 1975.
1.__Less than 3,000 3.__6,000 to 9,999 5.__15,000 to 24,999
2.__3,000 to 5,999 4.__10,000 to 14,999 6.__25,000 and over

How many years of school have you completed? (Please circle appropriate year or degree.)

Grade	High	College	Master	Doctorate
1 2 3 4 5 6 7 8	9 10 11 12	13 14 15 16	17	18

Where do you live most of the year in North Dakota?
__1. Farm __2. Town under 500 __3. Town 500-2500 __4. Town over 2500

Although this system tends to rely on somewhat judgmental placement of those with status inconsistency, it is, as a whole, a conservative index of social class, with those with the greatest inconsistencies being placed in middle class categories.

Results

In order to delineate the relationships between the variables in the study and to provide additional background, initial tables are presented, showing basic frequencies and cross tabulations. These are followed by tables showing detailed social class, occupational and residential breakdowns.

Table 1 presents data on the characteristics of respondents in the study. As can be seen, the respondents tended to be older (over 30% were 50 years of age or older), were likely to be employed as farmers (17.1%), and tended to live in farm and rural nonfarm residences (55.1% lived in nonurban areas). With the exception of some overrepresentation of those with upper income and higher levels of education, these characteristics reflect very closely the characteristics of the state's population as a whole (1970 census).

(Table 1 Here)

Table 2 presents data showing the level of support for economic growth and environmental protection among the total sample of respondents by selected respondent characteristics.

(Table 2 Here)

The most evident relationship in this table occurs in terms of age. Support for environmental protection is clearly strongest in the younger age groups and decreases with age, while support for economic

growth is considerably stronger among older respondents and decreases as age decreases. Thus, over 52% of persons 18-24 years of age gave pro-environmental answers and 40.9% gave pro-economic growth answers, but only 30.0% of those 65 years of age and over gave pro-environmental answers, while over 65% gave pro-economic growth answers. This finding clearly corresponds with findings from earlier studies (McEvoy, 1972; Harry, et al., 1969).

Occupational differences in the table also correspond with past findings with students, professionals and educators showing relatively high levels of support for environmental protection, while skilled workers, executives, and unskilled workers indicate high levels of support for economic growth. The results for farmers indicate an interesting pattern with levels of support falling between the above two groups. As earlier suggested, this may reflect both their basic dependence on natural resource preservation and their recognition of the increased markets resulting from economic growth.

Income and educational differences indicate the expected patterns, with respondents in lower income and educational levels being more supportive of economic growth and those with higher levels of education being more supportive of environmental protection.

In sum, then, the results in Table 2 indicate that the patterns in the sample are very similar to the results noted in other studies (Harry, et al., 1969; McEvoy, 1972).

Tables 3 through 6 present data showing age, occupational, income and educational differences for each of the four residence categories of urban, towns under 500, towns 500-2500 and rural farm. The rural nonfarm category (towns under 500 and 500-2500) is

disaggregated for this analysis because of the prevalence of rural small towns in the state. For example, of the 359 incorporated places in North Dakota in 1970, 71.6% had 500 or fewer people. Thus, towns below 500 play a significant role in the state. At the same time, towns of this size have experienced long periods of economic decline and their residents may be expected to display somewhat distinct patterns of response.

(Tables 3-6 Here)

The data in each of the tables reflect the patterns previously noted in Table 2, with age, occupation, income and education having the expected patterns. Of central concern here, however, are the differences between residential groups. Although generalizations from these data must be made with care, due to sample sizes in some categories, several marked differences may be noted.

For example, in comparing residence groups by age, it is evident that for almost all age categories, the level of support for economic growth is strongest for residents in towns under 500, followed by residents in towns of 400-2500. Urban and farm residents show similar and generally lower levels of support for economic growth.

Patterns like those noted above are also evident for the variable of income. Whereas 47.5% of those with incomes of less than 3,000 in urban areas supported economic growth, 55.9% of those in this income category in towns of 500-2500, and over 56% in towns of less than 500 people supported economic growth. Farm groups tended to fall between the urban and rural nonfarm groups, with 49.3% of those with incomes under 3,000 supporting economic growth.

Occupational breakdowns indicate a similar pattern by residence, with those in all occupational groupings in rural nonfarm areas showing greater support for economic growth than those in the same occupational groupings in urban and rural farm areas. Comparisons of educational categories in these tables reveal some departures from the patterns noted above, with those with less than 12 years of education in urban areas showing stronger support for economic growth than those in this educational category in other residence groupings.

In sum, these tables reveal that although the general patterns for the total sample are maintained in each of the resident subcategories, there are marked differences between residence categories, with rural small town residents showing the greatest support for economic growth. In addition, the findings indicate almost equally strong levels of support for environmental protection among rural farm residents as among urban residents. Thus, the results in these tables demonstrate the importance of differentiating between types of rural residents. They also point to an accentuation of differences by social characteristics within some residence types. Thus, separate and joint effects of social characteristics and residence are evident.

Table 7 presents additional findings from the survey, with social class breakdowns within occupational categories being presented. Though care must be taken in interpreting these results due to the small sample sizes in some categories, the results do point to social class differences within occupational groupings. The last row of Table 7 indicates total social class differences. The data in this row indicate marked social class differences, with over 63% of lower class

respondents favoring economic growth, but only 50.5% of upper class respondents supporting such growth.

(Table 7 Here)

Within the body of Table 7 several interesting social class and occupational differences are evident. Students and educators in all social class categories tend to favor environmental protection over economic growth. On the other hand, housewives, executives and skilled workers in all social classes support economic growth. In many other occupational groups, however, it is clear that social class standing affects the relative levels of support for environmental protection and economic growth. Thus, for the occupational categories of farmers and sales workers, support for environmental protection is a middle and upper class phenomena, while for professionals, it tends to be only a middle class phenomena. The data in Table 7, then, seem to point to social class as well as occupational differences.

Further delineations of the interrelations between residence, occupation and social class can be seen by examining Tables 8-10. In these tables, levels of support for environmental protection and economic growth are shown by social classes, occupational group and residence type. In Table 9, due to the small sample sizes, residents in towns under 500 and in towns of 500-2500 are combined into a single rural nonfarm category.

Total social class differences are shown in the final row of Tables 8, 9 and 10. When these are compared, it is evident that stronger support is shown for environmental protection among upper class respondents in each table. Such comparisons again reveal

differences by resident types, however. Thus, lower class respondents in each residence category tend to favor economic growth, with 64.3% of the urban lower class, 63.7% of the rural nonfarm lower class and 60.1% of the rural farm lower class favoring economic growth, middle and upper class respondents show marked differences by residence type. Although upper class respondents in each residence group tend to show stronger levels of support for environmental protection than other social class groups, over eight percentage points separate the rural farm and nonfarm upper class categories in terms of their levels of support for environmental protection. Thus, for both middle class and upper class respondents, rural farm and urban residence tends to increase the level of support for environmental protection, while rural nonfarm middle and upper class residents maintain quite strong support for economic growth.

Several occupational differences by residence are also revealed by comparing Tables 8, 9 and 10. Although care must again be taken because of the small numbers in some occupational categories, several general findings may be noted. Thus, it appears that for housewives, farmers, professionals, executives and those employed in sales, lower class status in an urban setting is an especially strong set of circumstances affecting respondent orientations, with a large percentage of those of lower class status in each of these occupational groups in urban areas favoring economic growth.

(Tables 8-10 Here)

In rural farm and urban residences, middle or upper class standing tends to increase the level of support for environmental protection, while middle or upper class standing has less effect in rural nonfarm areas where strong levels of support for economic growth are maintained

in all social class groups. These findings, then, seem to indicate that support for environmental protection does tend to be a middle and upper class phenomena, but less so in rural nonfarm areas.

Rural nonfarm areas, as noted earlier, display somewhat heterogeneous patterns, depending on the size of the areas of residence. In order to examine these differences, Table 11 presents social class data by occupation for the two categories of rural nonfarm residence noted earlier (towns under 500 and towns 500-2500). Although occupational categories must be ignored due to small cell values, social class differences in the last row of the table may be noted.

(Table 11 Here)

A comparison of the totals in this row for social class indicates that a high level of support for economic growth is maintained in the lower and middle classes in both subcategories of nonfarm residence, but that such support, while markedly reduced for upper class persons in residence areas of 500-2500 population, increases for upper class residents in towns under 500 population. Thus, for residents of small towns, persons of all social classes tend to favor economic growth.

Finally, Table 12 presents the levels of association, as measured by Gamma, between levels of support for economic growth and environmental protection and the various combinations of variables as shown in Tables 2-11. In the computation of these measures, levels of support for economic growth and environmental protection were treated as an ordinal variable, with levels of support for economic growth being placed in the high category. Thus, positive values indicate

a direct relationship between a given variable and support for economic growth, while negative values indicate a relatively stronger relationship to support for environmental protection.

(Table 12 Here)

The data in Table 12 clearly support the findings in previous tables. Thus, regardless of the variable included or controlled for, respondents in rural nonfarm areas, especially those living in towns under 500 were less likely to have their levels of support for either environmental protection or economic growth affected by other characteristics. When taken in conjunction with the data in Tables 2-11, which show high levels of support for economic growth among such populations, these data clearly indicate that levels of support for economic growth tend to be higher among respondents in rural nonfarm areas regardless of their characteristics in terms of social class, occupation or income.

In addition, however, the data reveal that in both urban and rural farm areas, characteristics of respondents tend to have an effect on perceptions. Thus, social class, and particularly occupation, have quite strong effects on levels of support for economic growth and environmental protection in urban and rural farm areas. This is true even when each variable, social class and occupation, is examined with the other controlled.

In sum then, Table 12 further verifies the similarity between the response patterns of rural farm and urban residents and the quite different patterns of response for rural nonfarm residents.

Discussion

Although data such as those presented here clearly require further examination, the results of the analysis of these data serve both as a reaffirmation of many of the findings of past studies and indicate several extensions of the findings of past efforts.

The findings, thus, clearly reaffirm the general findings of past studies, which show higher levels of support for environmental protection among those respondents who are young, highly educated and those who have higher incomes. Thus, the often found relationship between middle and upper class standing and support for environmental protection is verified.

Beyond these findings, however, the results point to the need for a more careful examination and delineation of differences in perceptions by type of residence. Thus, rather than delineating a simple rural-urban differential in response patterns, the data point to marked differences within rural groups, with rural farm populations showing very high levels of support for environmental protection, while rural nonfarm populations, especially those residing in very small towns, show high levels of support for economic growth. In addition, these findings indicate that although the levels of support for environmental protection and economic growth in urban and rural farm populations are affected when controls for social class and occupation are introduced, in rural nonfarm populations levels of support for economic growth remain high even when individual social class and occupational differences are eliminated. Thus, rural nonfarm existence has a pervasive influence on respondents' perceptions.

Even though additional controls might reduce the effect of rural nonfarm residence on response patterns and the fact that the indicated response patterns for residents of rural nonfarm areas may not be surprising, given the economic realities in small rural towns, the findings do indicate a need for more careful delineations of structural factors, such as residence, as determinants of perceptions toward the environment. Thus, rather than concentrating on individual characteristics as a way of explaining away contextual variables, it may be that additional consideration of the explanatory power of structural and contextual variables themselves would be beneficial for the study of environmental perceptions in particular and for the field of environmental sociology as a whole.

REFERENCES

Brodbeck, May (ed.)
1968 Readings in the Philosophy of the Social Sciences. New York: MacMillan

Burch, William R., Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.)
1972 Social Behvaior, Natural Resources, and the Environment. New York: Harper & Row.

Buttel, Frederick H. and William L. Flinn
1974 "The structure of support for the environmental movement, 1968-1970." Rural Sociology 39:56-59.

Buttel, Frederick H. and William L. Flinn
1976 "Environmental politics: the structuring of partisan and ideological cleavages in mass environmental attitudes." The Sociological Quarterly 17:477-490.

Dillman, Don A. and James A. Christenson
1972 "The public value for pollution control." Pp. 237-256 In William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.), Social Behavior, Natural Resources, and the Environment. New York: Harper & Row.

Erikson, Robert S., and Norman R. Luttbeg
1973 American Public Opinion. New York: Wiley.

Gale, Richard P.
1972 "From sit-in to hike-in: a comparison of the civil rights and environmental movements." Pp. 280-305 in William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.), Social Behavior, Natural Resources, and the Environment. New York: Harper & Row.

Harry, Joseph, Richard P. Gale and John C. Hendee
1969 "Conservation: an upper-middle class social movement." Journal of Leisure Research 1:246-54.

Klausner, Samuel Z.
1972 "Some problems in the logic of current man-environment studies." Pp. 334-364 in William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.), Social Behavior, Natural Resources and the Environment. New York: Harper & Row.

Marx, Karl and Frederick Engels
1930 The Communist Manifesto. New York: International Publishers.

McEvoy, James III
1972 "The American concern with environment. Pp. 124-36 in William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.), Social Behavior, Natural Resources, and the Environment. New York: Harper & Row.

Morrison, Denton E., Kenneth E. Hornbeck and W. Keith Warner
1972 "The environmental movement: some preliminary observations and predications." Pp. 259-79 in William R. Burch, Jr., Neil H. Cheek, Jr., and Lee Taylor (eds.), Social Behavior, Natural Resources, and the Environment. New York: Harper & Row.

Murdock, Steve H.
1976 "Progress report on analysis of North Dakota 100 Survey." North Dakota State Planning Division. Bismarck, North Dakota.

Parsons, Talcott
1951 The Social System. Glencoe, Illinois: The Free Press.

Schnaiberg, Allan
1975 "Social syntheses of the societal-environmental dialectic: the role of distributional impacts. Social Science Quarterly 14:465-80.

Tognacci, Louis N., Russell H. Weigel, Marvin P. Wideen and David T. A. Verson
1972 "Environmental quality: how universal is public concern?" Environment and Behavior 4:73-86.

TABLE 1: Social and Demographic Characteristics of Respondents

Characteristic	
Age	**%**
Less than 18	0.2
18-24	20.9
25-34	20.6
35-49	24.1
50-64	24.3
65+	9.9

Characteristic	
Family Income	**%**
Less than $ 3,000	6.4
$ 3,000 - $ 5,999	10.8
$ 6,000 - $ 9,999	16.6
$10,000 - $14,999	26.7
$15,000 - $24,999	24.0
$25,000+	15.5

Sex	%
Male	49.5
Female	50.5

Years of Education	%
0-7	2.0
8	10.6
9-11	6.7
12	31.2
13-15	28.3
16	14.6
17+	6.6

Number of Children Under 18	%
0	25.0
1	25.4
2	25.1
3	13.2
4	6.1
5+	5.2

Residence	%
Farm	29.8
Town under 500	9.4
Town 500-2,500	15.9
Urban	44.9

Occupation	%
Farmer	17.1
Housewife	27.0
Professional	4.1
Education	6.1
Executive	6.6
Sales	3.9
White Collar	4.7
Skilled Labor	7.5
Semi-Unskilled Labor	3.5
Retired	5.5
Student	8.1
Other	5.8

N = 3963

TABLE 2: Support for Economic Growth and Environmental Protection By Characteristics of Respondents

Characteristic	Economic Growth	Environmental Protection	Other	
Age				
Less than 18	12.5	87.5	0.0	(8)
18-24	40.9	52.5	6.6	(793)
25-34	42.5	47.1	10.4	(788)
35-49	57.8	35.3	6.9	(897)
50-64	59.5	23.3	8.3	(883)
65+	65.2	30.0	4.8	(333)
		(Total N = 3702)		
Occupation				
Farmer	48.5	43.3	8.2	(612)
Housewife	58.1	35.5	6.3	(996)
Professional	41.0	48.7	10.3	(156)
Education	40.7	48.5	10.8	(231)
Executive	60.8	29.2	10.0	(250)
Sales	52.1	38.9	9.0	(144)
White Collar	46.4	46.4	7.2	(181)
Skilled Labor	62.0	28.5	9.5	(274)
Semi-Unskilled Labor	55.4	38.5	6.1	(130)
Retired	60.3	31.2	8.5	(189)
Student	33.6	60.0	6.4	(310)
Other	50.7	44.1	5.2	(213)
		(Total N = 3686)		
Income				
Less than $ 3,000	50.9	40.1	9.0	(212)
$ 3,000 - $ 5,999	54.7	39.2	6.1	(375)
$ 6,000 - $ 9,999	54.9	37.4	7.6	(577)
$10,000 - $14,999	51.9	40.8	7.3	(956)
$15,000 - $24,999	49.8	41.4	8.8	(855)
$25,000+	51.4	41.2	7.5	(549)
		(Total N = 3524)		
Education				
0-7	63.2	29.8	7.0	(57)
8	63.8	31.6	4.5	(354)
9-11	67.1	28.8	4.2	(240)
12	57.8	34.9	7.3	(1167)
13-15	48.4	45.0	8.5	(1077)
16	40.0	51.2	8.8	(547)
17+	41.0	47.4	11.6	(251)
		(Total N = 3693)		
Residence				
Farm	49.8	41.7	8.5	(1074)
Town under 500	58.3	34.6	7.1	(347)
Town 500 - 2,500	54.4	39.0	6.6	(594)
Urban	51.1	40.9	8.0	(1696)
		(Total N = 3741)		

TABLE 3: Support for Economic Growth and Environmental Protection By Characteristics of Urban Respondents

Characteristic	Economic Growth	Environmental Protection	Other	
Age				
Less than 18	20.0	80.0	0.0	(5)
18-24	39.1	53.7	7.2	(419)
25-34	43.1	47.3	9.7	(404)
25-49	57.4	36.6	6.0	(434)
50-64	62.4	28.3	9.2	(314)
65+	70.7	22.4	6.9	(116)
		(Total N = 1692)		
Occupation				
Farmer	57.1	42.9	0.0	(35)
Housewife	60.1	34.6	5.4	(373)
Professional	39.0	50.0	11.0	(118)
Education	41.8	47.5	10.6	(141)
Executive	60.7	28.9	10.4	(173)
Sales	51.4	38.7	9.9	(111)
White Collar	44.4	47.6	8.1	(124)
Skilled Labor	60.9	29.1	9.9	(151)
Semi-Unskilled Labor	53.0	40.9	6.1	(66)
Retired	63.2	27.9	8.8	(68)
Student	30.7	62.5	6.8	(192)
Other	52.0	43.2	4.8	(125)
		(Total N = 1677)		
Income				
Less than $ 3,000	47.5	43.8	8.8	(80)
$ 3,000 - $ 5,999	50.6	43.4	6.0	(166)
$ 6,000 - $ 9,999	55.3	35.0	9.7	(226)
$10,000 - $14,999	53.7	38.1	8.2	(454)
$15,000 - $24,999	48.2	43.7	8.1	(471)
$25,000+	52.6	41.4	6.0	(249)
		(Total N = 1646)		
Education				
0-7	75.0	16.7	8.3	(12)
8	76.7	16.7	6.7	(60)
9-11	73.4	25.3	1.3	(79)
12	59.3	33.5	7.2	(442)
13-15	48.2	44.6	7.2	(558)
16	42.5	48.4	9.1	(339)
17+	39.6	48.4	12.0	(192)
		(Total N = 1682)		

TABLE 4: Support for Economic Growth and Environmental Protection By Characteristics of Respondents in Towns of 500-2500 Persons

Characteristic	Economic Growth	Environmental Protection	Other	
Age				
Less than 18	0.0	100.0	0.0	(2)
18-24	40.7	55.1	4.2	(118)
25-34	49.6	41.9	8.5	(129)
35-49	59.5	32.8	7.7	(131)
50-64	62.0	31.0	7.0	(142)
65+	63.8	31.9	4.3	(69)
		(Total N = 591)		
Occupation				
Farmer	40.9	52.3	6.6	(44)
Housewife	61.5	34.3	4.2	(169)
Professional	46.4	46.4	7.2	(28)
Education	50.0	37.5	12.5	(40)
Executive	63.5	28.9	7.6	(52)
Sales	50.0	50.0	0.0	(18)
White Collar	57.1	39.3	3.6	(28)
Skilled Labor	55.8	34.6	9.6	(52)
Semi-Unskilled Labor	57.7	34.6	7.7	(26)
Retired	56.3	35.4	8.3	(48)
Student	35.9	59.0	5.1	(39)
Other	43.9	46.3	9.8	(41)
		(Total N = 585)		
Income				
Less than $ 3,000	55.9	38.2	5.9	(34)
$ 3,000 - $ 5,999	54.6	37.9	7.5	(66)
$ 6,000 - $ 9,999	56.6	35.4	8.0	(113)
$10,000 - $14,999	51.0	43.4	5.6	(198)
$15,000 - $24,999	55.2	35.4	9.4	(96)
$25,000+	56.0	40.0	4.0	(50)
		(Total N = 557)		
Education				
0-7	66.7	20.0	13.3	(15)
8	63.0	32.6	4.4	(46)
9-11	66.7	31.1	2.2	(45)
12	62.5	32.5	5.0	(200)
13-15	47.5	46.3	6.2	(162)
16	38.3	50.6	11.1	(81)
17+	51.4	40.0	9.6	(35)
		(Total N = 584)		

TABLE 5: Support for Economic Growth and Environmental Protection By Characteristics of Respondents in Towns Under 500

Characteristic	Economic Growth	Environmental Protection	Other	
Age				
Less than 18	0.0	100.0	0.0	(1)
18-24	51.7	35.0	13.3	(60)
25-34	41.3	46.0	12.7	(63)
35-49	63.0	31.5	5.5	(73)
50-64	61.2	35.7	3.1	(98)
65+	73.8	21.4	4.8	(42)
		(Total N = 337)		
Occupation				
Farmer	41.7	54.2	4.1	(24)
Housewife	59.6	37.4	3.0	(99)
Professional	50.0	25.0	25.0	(4)
Education	44.8	41.4	13.5	(29)
Executive	52.9	35.3	11.8	(17)
Sales	69.2	15.4	15.4	(13)
White Collar	69.2	15.4	15.4	(17)
Skilled Labor	64.3	26.2	9.5	(42)
Semi-Unskilled Labor	52.2	43.5	4.3	(23)
Retired	73.0	18.9	8.1	(37)
Student	46.2	38.5	15.3	(13)
Other	66.7	33.3	0.0	(21)
		(Total N = 339)		
Income				
Less than $ 3,000	65.4	26.9	7.7	(26)
$ 3,000 - $ 5,999	64.0	32.0	4.0	(50)
$ 6,000 - $ 9,999	55.1	36.2	8.7	(69)
$10,000 - $14,999	48.9	43.6	7.5	(94)
$15,000 - $24,999	57.8	32.4	9.8	(71)
$25,000+	79.0	15.8	5.2	(19)
		(Total N = 339)		
Education				
0-7	50.0	50.0	0.0	(6)
8	69.4	26.5	4.1	(49)
9-11	72.7	27.3	0.0	(33)
12	59.4	33.1	7.5	(133)
13-15	49.3	40.6	10.1	(69)
16	46.8	42.6	10.6	(47)
17+	60.0	30.0	10.0	
		(Total N = 329)		

TABLE 6: Support for Economic Growth and Environmental Protection By Characteristics of Rural Farm Respondents

Characteristic	Economic Growth	Environmental Protection	Other	
Age				
Less than 18	0.0	0.0	0.0	(0)
18-24	42.1	52.6	5.3	(190)
25-34	36.7	50.5	12.8	(188)
35-49	55.6	35.8	8.6	(257)
50-64	54.9	35.5	9.3	(324)
65+	56.2	41.0	2.9	(105)
		(Total N = 1064)		
Occupation				
Farmer	48.9	42.0	9.1	(507)
Housewife	54.0	36.7	9.5	(349)
Professional	50.0	50.0	0.0	(6)
Education	9.5	85.7	4.8	(21)
Executive	62.5	25.0	12.5	(8)
Sales	0.0	100.0	0.0	(2)
White Collar	27.3	72.7	0.0	(11)
Skilled Labor	75.9	17.2	6.9	(29)
Semi-Unskilled Labor	66.7	26.7	6.7	(15)
Retired	45.5	45.5	9.1	(33)
Student	39.7	55.6	4.8	(63)
Other	44.0	52.0	4.0	(25)
		(Total N = 1069)		
Income				
Less than $ 3,000	49.3	39.1	11.6	(69)
$ 3,000 - $ 5,999	56.7	36.7	6.7	(90)
$ 6,000 - $ 9,999	53.3	42.5	4.2	(167)
$10,000 - $14,999	50.0	42.7	7.3	(206)
$15,000 - $24,999	48.8	41.4	9.8	(215)
$25,000+	46.7	43.2	10.0	(229)
		(Total N = 976)		
Education				
0-7	58.3	37.5	4.2	(24)
8	58.8	37.2	4.0	(199)
9-11	58.5	31.7	9.8	(82)
12	53.4	38.0	8.6	(384)
13-15	42.3	45.4	12.3	(284)
16	26.9	69.2	3.9	(78)
17+	21.4	64.3	14.3	(14)
		(Total N = 1065)		

TABLE 7: Level of Support for Economic Growth and Environmental Protection for All Respondents By Occupation and Social Class

Occupation	Economic Growth			Environmental Protection		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Farmer	60.9 (131)	48.6 (85)	47.2 (58)	39.1 (84)	51.4 (90)	52.8 (65)
Housewife	68.9 (210)	59.6 (221)	55.3 (109)	31.1 (95)	40.4 (150)	44.7 (88)
Professional	57.1 (4)	30.3 (10)	51.0 (49)	42.9 (3)	69.7 (23)	49.0 (47)
Education	40.0 (4)	47.9 (23)	45.5 (66)	60.0 (6)	52.1 (25)	54.5 (79)
Executive	74.3 (26)	67.1 (57)	66.3 (67)	25.7 (9)	32.9 (28)	33.7 (34)
Sales	72.6 (37)	49.0 (24)	43.3 (13)	27.4 (14)	51.0 (25)	56.7 (17)
White Collar	39.3 (11)	56.0 (47)	46.3 (25)	60.7 (17)	44.0 (37)	53.7 (29)
Skilled Labor	70.2 (80)	65.6 (78)	60.0 (6)	29.8 (34)	34.6 (41)	40.0 (4)
Semi-Unskilled Labor	61.3 (49)	54.0 (14)	33.3 (2)	38.8 (31)	46.0 (12)	66.7 (4)
Retired	70.5 (74)	63.6 (21)	46.7 (7)	29.5 (31)	36.4 (12)	53.3 (8)
Student	42.7 (44)	36.9 (41)	31.6 (12)	57.3 (59)	63.1 (70)	68.4 (26)
Other	58.0 (47)	53.3 (40)	44.4 (16)	42.0 (34)	46.7 (35)	55.6 (20)
Total N = 3193	63.2 (717)	54.7 (661)	50.5 (430)	36.8 (417)	45.3 (548)	49.5 (421)

TABLE 8: Level of Support for Economic Growth and Environmental Protection for Urban Respondents By Occupation and Social Class

Occupation	Economic Growth			Environmental Protection		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Farmer	83.3 (10)	40.0 (2)	43.8 (7)	16.7 (2)	60.0 (3)	56.2 (9)
Housewife	75.3 (70)	62.1 (105)	53.0 (44)	24.7 (23)	37.9 (64)	47.0 (39)
Professional	60.0 (3)	21.7 (5)	49.4 (38)	40.0 (2)	78.3 (18)	50.6 (39)
Education	50.0 (2)	40.0 (8)	48.5 (48)	50.0 (2)	60.0 (12)	51.5 (51)
Executive	87.5 (14)	65.5 (38)	65.8 (52)	13.5 (2)	34.5 (20)	34.2 (27)
Sales	73.7 (28)	46.0 (17)	48.0 (12)	26.3 (10)	54.0 (20)	52.0 (13)
White Collar	40.0 (8)	52.2 (24)	46.8 (22)	60.0 (12)	47.8 (22)	53.2 (25)
Skilled Labor	64.2 (34)	69.4 (50)	62.5 (5)	35.8 (19)	30.6 (22)	37.5 (3)
Semi-Unskilled Labor	60.5 (23)	60.0 (9)	0.0 (0)	39.5 (15)	40.0 (6)	100.0 (4)
Retired	87.1 (27)	64.3 (9)	50.0 (5)	12.9 (4)	35.7 (5)	50.0 (5)
Student	39.7 (25)	29.4 (20)	38.7 (12)	60.3 (38)	70.6 (48)	31.3 (19)
Other	54.8 (23)	61.2 (30)	42.9 (12)	45.2 (19)	38.8 (19)	57.1 (16)
Total N = 1498	64.3 (267)	55.0 (317)	50.7 (257)	35.7 (148)	45.0 (259)	49.3 (250)

TABLE 9: Level of Support for Economic Growth and Environmental Protection for Rural Nonfarm Respondents By Occupation and Social Class

Occupation	Economic Growth			Environmental Protection		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Farmer	55.0 (11)	52.9 (9)	33.3 (6)	45.0 (9)	47.1 (8)	66.7 (12)
Housewife	64.2 (70)	59.3 (54)	65.0 (26)	35.8 (39)	40.7 (37)	35.0 (14)
Professional	0.0 (0)	62.5 (5)	56.3 (9)	100.0 (1)	37.5 (3)	43.7 (7)
Education	40.0 (2)	61.9 (13)	52.9 (18)	60.0 (3)	38.2 (8)	47.1 (16)
Executive	62.5 (10)	70.8 (17)	66.7 (14)	37.5 (6)	29.2 (7)	33.3 (7)
Sales	69.2 (9)	63.6 (7)	25.0 (1)	30.8 (4)	36.4 (4)	75.0 (3)
White Collar	42.9 (3)	65.5 (19)	50.0 (2)	57.1 (4)	34.5 (10)	50.0 (2)
Skilled Labor	75.6 (31)	55.0 (22)	50.0 (1)	24.4 (10)	45.0 (18)	50.0 (1)
Semi-Unskilled Labor	61.3 (19)	40.0 (4)	100.0 (1)	38.7 (12)	60.0 (6)	0.0 (0)
Retired	70.4 (38)	64.3 (9)	33.3 (1)	29.6 (16)	35.7 (5)	66.7 (2)
Student	40.0 (10)	44.4 (8)	0.0 (0)	60.0 (15)	55.6 (10)	100.0 (2)
Other	72.0 (18)	47.1 (8)	60.0 (3)	28.0 (7)	52.9 (9)	40.0 (2)
Total N = 797	63.7 (221)	58.3 (175)	54.7 (82)	36.3 (126)	41.7 (125)	45.3 (68)

TABLE 10: Level of Support for Economic Growth and Environmental Protection for Rural Farm Respondents By Occupation and Social Class

Occupation	Economic Growth			Environmental Protection		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Farmer	59.5 (110)	49.0 (74)	51.1 (46)	40.5 (75)	51.0 (77)	48.9 (44)
Housewife	67.6 (69)	56.0 (61)	52.8 (38)	32.4 (33)	44.0 (48)	47.2 (34)
Professional	100.0 (1)	0.0 (0)	50.0 (1)	0.0 (0)	100.0 (2)	50.0 (1)
Education	0.0 (0)	28.6 (2)	0.0 (0)	100.0 (1)	71.4 (5)	100.0 (12)
Executive	66.7 (2)	66.7 (2)	100.0 (1)	33.3 (1)	33.3 (1)	0.0 (0)
Sales	0.0 (0)	0.0 (0)	0.0 (0)	0.0 (0)	100.0 (1)	100.0 (1)
White Collar	0.0 (0)	37.5 (3)	0.0 (0)	100.0 (1)	62.5 (5)	100.0 (2)
Skilled Labor	79.0 (15)	85.7 (6)	0.0 (0)	21.0 (4)	14.3 (1)	0.0 (0)
Semi-Unskilled Labor	63.6 (7)	100.0 (1)	100.0 (1)	36.4 (4)	0.0 (0)	0.0 (0)
Retired	44.4 (8)	60.0 (3)	50.0 (1)	55.6 (10)	40.0 (2)	50.0 (1)
Student	39.1 (9)	50.0 (10)	0.0 (0)	60.9 (14)	50.0 (10)	100.0 (5)
Other	42.9 (6)	66.7 (2)	33.3 (1)	57.1 (8)	33.3 (1)	66.7 (2)
Total	60.1 (227)	51.7 (164)	46.6 (89)	39.9 (151)	48.3 (153)	53.4 (102)

TABLE 11: Support for Economic Growth and Environmental Protection for Residents of Towns Under 500 and 500-2500 by Occupation and Social Class

Occupation	Towns Under 500						Towns 500-2500					
	Economic Growth			Environmental Protection			Economic Growth			Environmental Protection		
	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class	Lower Class	Middle Class	Upper Class
Farmers	50.0 (3)	50.0 (3)	50.0 (4)	50.0 (3)	50.0 (3)	50.0 (4)	57.1 (8)	54.6 (6)	20.0 (2)	42.9 (6)	45.5 (5)	80.0 (8)
Housewife	55.6 (25)	57.6 (19)	88.9 (8)	44.4 (20)	42.4 (14)	11.1 (1)	70.3 (45)	60.3 (35)	58.1 (18)	29.7 (19)	39.7 (23)	41.9 (13)
Professional	0.0 (0)	100.0 (1)	50.0 (1)	0.0 (0)	0.0 (0)	50.0 (1)	0.0 (0)	57.1 (4)	57.1 (8)	100.0 (1)	42.9 (3)	42.9 (6)
Education	0.0 (0)	58.3 (7)	50.0 (6)	100.0 (1)	41.7 (5)	50.0 (6)	50.0 (2)	66.7 (6)	54.5 (12)	50.0 (2)	33.3 (3)	45.5 (10)
Executive	66.7 (2)	33.3 (2)	83.3 (5)	33.3 (1)	66.7 (4)	16.7 (1)	61.5 (8)	83.3 (15)	60.0 (9)	38.5 (5)	16.7 (3)	40.0 (6)
Sales	83.3 (5)	75.0 (3)	100.0 (1)	16.7 (1)	25.0 (1)	0.0 (0)	57.1 (4)	57.1 (4)	0.0 (0)	42.9 (3)	42.9 (3)	100.0 (3)
White Collar	50.0 (1)	70.0 (7)	33.3 (1)	50.0 (1)	30.0 (3)	66.7 (2)	40.0 (2)	63.2 (12)	100.0 (1)	60.0 (3)	36.8 (7)	0.0 (0)
Skilled Labor	81.3 (13)	65.0 (13)	50.0 (1)	18.7 (3)	35.0 (7)	50.0 (1)	72.0 (18)	45.0 (9)	0.0 (0)	28.0 (7)	55.0 (11)	0.0 (0)
Semi-Unskilled Labor	58.8 (10)	25.0 (1)	100.0 (1)	41.2 (7)	75.0 (3)	0.0 (0)	64.3 (9)	50.0 (3)	0.0 (0)	35.6 (5)	50.0 (3)	0.0 (0)
Retired	74.1 (20)	100.0 (3)	100.0 (1)	25.9 (7)	0.0 (0)	0.0 (0)	66.7 (18)	54.5 (6)	0.0 (0)	33.3 (9)	45.5 (5)	100.0 (2)
Student	62.5 (5)	33.3 (1)	0.0 (0)	37.5 (3)	66.7 (2)	0.0 (0)	29.4 (5)	46.7 (7)	0.0 (0)	70.6 (12)	53.3 (8)	100.0 (2)
Other	70.0 (7)	57.1 (4)	100.0 (1)	30.0 (3)	42.9 (3)	0.0 (0)	73.3 (11)	40.0 (4)	50.0 (2)	26.7 (4)	60.0 (6)	50.0 (2)
	64.5 (91)	58.7 (64)	65.2 (30)	35.5 (50)	41.3 (45)	34.8 (16)	63.1 (130)	58.1 (111)	50.0 (52)	36.9 (76)	41.9 (80)	50.0 (52)

TABLE 12: Gamma's Between Selected Variables and Level of Support For Economic Growth and Environmental Protection Within Residence Areas

Independent Variable	Total Sample	Residence Area: Urban	Towns 500-2500	Towns of 500	Farm
Age	.26	.33	.26	.19	.19
Occupation	-.15	-.13	-.09	-.05	-.56
Income	-.04	-.03	-.02	-.001	-.05
Education	-.24	-.28	-.25	-.18	-.25

	Total Sample	Urban	Rural Nonfarm	Rural Farm
Social Class	-.17	-.17	-.12	-.18
Occupation	-.13	-.16	-.04	-.58
Occupation Controlling For Social Class				
Lower Class	.02	.14	-.10	-.02
Middle Class	-.15	-.25	.16	-.63
Upper Class	-.04	-.03	-.03	-.23
Social Class Controlling For Occupation				
Farmer	-.20	-.56	-.28	-.14
Housewife	-.19	-.29	-.03	-.21
Professional	.27	-.36	.08	-.20
Education	-.01	-.12	-.04	-.85
Executive	-.09	-.12	.05	.33
Sales	-.40	-.37	-.40	0.00
White Collar	-.01	.03	.17	-.33
Skilled Labor	-.12	.07	-.42	.23
Semi-Unskilled Labor	-.24	-.33	-.27	1.00
Retired	-.27	-.59	.49	.25
Student	-.14	-.07	-.06	-.14
Other	-.16	-.11	-.53	.26